#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-016697 Address: 333 Burma Road **Date Inspected:** 09-Sep-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Jobsite

**CWI Name:** See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: SAS OBG** 

## **Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Splice 1W/2W Weld ID: ALS1 (SMAW)
- 2). OBG Field Splice 2W/3W Weld ID: ALS5 & ALS6 (SMAW)
- 3). OBG Field Welding of Upper Lug Restoration between PP10 PP11 (SMAW)
- 4). OBG Field Welding of Studs to Edge Plate between PP13 PP14 (SMAW)
- 5). OBG Field Splice 4E/5E Weld ID: B1 Face A (QC NDE)

#### 1). OBG Field Splice 1W/2W Weld ID: ALS1 - (SMAW)

The QAI periodically observed AB/F approved welder Wai Kitlai (ID 2953) performing Complete Joint Penetration (CJP) welding per the SMAW process in the 3G (vertical) position. Mr. Wai Kitlai was welding Complete Joint Penetration (CJP) fill passes at A LS1 from face B after back grinding. QC Inspector Tom Pasqualone was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1012-3. The QAI observed that the welding at this location was complete and grinding was in process for the duration of the shift. The QAI observed that the work at this location appeared to be in general compliance with contract documents.

2). OBG Field Splice 2W/3W Weld ID: ALS5 & ALS6 - (SMAW)

The QAI periodically observed AB/F approved welder Yao Xin Liang (ID 7238) performing welding per the

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SMAW process in the 3G (vertical) position. Mr. Yao Xin Liang was welding Butter passes at ALS6 and ALS5 to restore the joint preparation. QC Inspector Tom Pasqualone was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1012-3. The QAI observed that the welding at this location was in process for the duration of the shift. The QAI observed that the work at this location appeared to be in general compliance with contract documents.

## 3). OBG Field Welding of Upper Lug Restoration between PP10 - PP11 - (SMAW)

The QAI periodically observed AB/F approved welder Rick Clayborn (ID 2773) performing CJP welding per the Shielded Metal Arc Welding (SMAW) process in the 2G (horizontal) and 4G (overhead) positions to restore a portion of the counter weight assembly upper lug at the A deck plate at W1. See photo below, QC Inspector Mike Johnson was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000. The QAI observed that the work appeared to be in general compliance with contract documents.

### 4). OBG Field Welding of Studs to Edge Plate between PP13 - PP14 - (SMAW)

The QAI periodically observed AB/F approved welder Darcell Jackson (ID 9967) performing fillet welding per the Shielded Metal Arc Welding (SMAW) process in the 2F, 3F and 4F positions to repair and attach Studs to the edge plate on the Counter Weight side of the OBG between PP13 and PP14 and at PP19. See photo below. QC Inspector Mike Johnson was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-F1200A. The QAI observed that the work appeared to be in general compliance with contract documents.

## 5). OBG Field Splice 4E/5E Weld ID: B1 Face A – (QC NDE)

The QAI periodically observed QC Inspector Tom Pasqualone performing UT from the A face (exterior) of OBG Field Splice 4E/5E Weld ID: B1. The QAI observed that Mr. Pasqualone utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination of the splice weld. The QC technician performed the required longitudinal wave testing utilizing a 1" diameter transducer for base metal soundness and performed the required shear wave testing during the testing for weld soundness utilizing a .63 x .75 rectangular transducer. Testing at this location was in process and appeared to be in general compliance with contract documents.





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## **Summary of Conversations:**

At approximately 1100 the QAI spoke with QC Inspector Bonafacio Daquinag Jr. and asked if any locations were QC NDE completed and available for QAI verification testing. Mr. Daquinag stated that the UT of OBG Field Splices 4E/5E welds B1 and F1 were to be completed from the exterior during this shift but the two technicians had temporarily been re-assigned to the tower.

Other conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By:	Madison,Bert	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer